

# Pencemaran merkuri dan strategi penanganan penambangan emas tanpa izin (PETI) di Pongkor, Jawa Barat

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## Abstrak

Kegiatan PETI merupakan kegiatan ilegal yang berisiko tinggi, baik bagi para penambang maupun Lingkungan hidup. Mulai dari proses penambangan, pengangkutan, dan pengolahan emas dilakukan dengan teknik yang sangat sederhana. Pada proses penambangan, dampak negatif yang timbul adalah terjadinya longsor yang dapat mengakibatkan kematian bagi pekerja tambang. Proses pengolahan emas menggunakan bahan toksik merkuri yang dapat menimbulkan pencemaran air dan tanah. Proses pemanasan, menghasilkan limbah gas (uap) merkuri yang menyebabkan pencemaran udara dan gangguan kesehatan terutama pada pekerja PETI.

Salah satu sungai yang berpotensi tercemar merkuri adalah sungai Cikaniki yang mengalir melewati beberapa desa di Kecamatan Nanggung Kabupaten Bogor, Jawa Barat. Pengolahan bijih emas langsung dilakukan di dalam sungai dengan menggunakan alat yang sederhana (gelundung). Merkuri yang digunakan rata-rata 0,5 -1 kg untuk 8 --10 kg bijih emas.

Krisis ekonomi dan meningkatnya harga emas serta ditunjang akses ke lokasi yang sangat mudah menyebabkan jumlah PER di Gunung Pongkor meningkat.

PT. Aneka Tambang Tbk melakukan penambangan emas dengan teknik tambang bawah tanah (underground mining) dan proses pengolahan emas menggunakan sianida.

Keberadaan urat-urat bijih emas yang muncul ke permukaan berupa singkapan-singkatan (outcrop) menyebabkan jumlah dan aktivitas PETI meningkat sampai ke kawasan hutan lindung (Taman Nasional Gunung Halimun) sehingga menyebabkan kerusakan hutan dan lahan.

Tujuan penelitian ini adalah untuk memperoleh data kandungan merkuri dalam air, sedimen, biota sungai Cikaniki dan memperoleh rumusan strategi yang efektif untuk penanganan PETI di Pongkor melalui analisis SWOT.

Metoda penelitian yang digunakan adalah metoda survei. Metode Pengambilan sampel sesuai SNI 06-2421. Lokasi sampling terdiri atas Lokasi A(hulu), B(Tengah) dan C(hilir) sungai Cikaniki. Analisis dilakukan di laboratorium Sarpedal, Kementerian Lingkungan Hidup.

Untuk memperoleh rumusan strategi dilakukan pengumpulan data primer para Stakeholder ( Pemda Bogor, PT. ANTAM Tbk, Pemuka masyarakat, LSM dan PETI. Analisis data menggunakan SWOT.

Berdasarkan hasil penelitian ini dapat disimpulkan bahwa:

1. Kandungan merkuri dalam air, sedimen, dan ganggang di lokasi B (tengah) lebih tinggi dibandingkan dengan lokasi A (hulu) dan lokasi C(hilir). Hal ini menunjukkan bahwa lokasi B yang merupakan pusat aktivitas PETI sangat berpotensi mencemari sungai Cikaniki.
2. Berdasarkan analisis SWOT, diperoleh 2 rumusan strategi prioritas untuk penanganan PETI di Pongkor yaitu strategi S-O (Strength-Opportunity) dengan nilai 3,32 dan W-T (Weakness-Threat) dengan nilai 1,77. Hal ini menunjukkan bahwa faktor kekuatan PETI dan penduduk lokal dapat ditingkatkan melalui program community development. Sedangkan faktor kelemahan harus dieliminasi untuk menghindari faktor-faktor ancaman. Strategi S -T (Strength -Threat) dengan nilai 2,60 dan W-O (Weakness-Opportunity) dengan nilai 2,48, dapat digunakan sebagai strategi lanjutan setelah melaksanakan strategi S-0 dan W -T.

Daftar Kepustakaan : 37(1971-2002)

<i>Mercury Pollution and Strategic Planning for Handling Illegal Gold Mining Activities in Pongkor, West Java</i>Illegal gold mining (PETI) are high risk activities. It endangers both the gold miners (prospectors) and environment, because its mining, transportation, and treatment processes are carried out using very simple techniques. Mining process generates negative impact in form of land sliding which threatens the gold worker.

During treatment process, the gold workers employ toxic mercury causing water and land pollution. On hitting process for separation of mercury and gold from the amalgam causing air pollution and health hazard for the workers.

One river that is potentially mercury polluted is the Cikaniki River that passes through several villages in Nanggung District, Bogor Regency, West Java. Gold ore treatment had been done direct in the river using a very simple equipment called gelundung, the mercury usage are 0.5-1 kg for 8-10 kg of gdd ore.

In accordance with the strike of economic crisis in Indonesia since 1997, the rise of gold price and the availability of easy access to the site, PETI activities at Gunung Pongkor increased significantly. In the middle 1993 the gold prospectors were about 6000 people (PT. Aneka Tambang,1999).

PT, Aneka Tambang is a government-owned company that found the Pongkor site in 1987. This company applied underground mining and used cyanide compound during processing phase. The presence of gold pitch blend appeared on the surface in form of out crop causes an increase in number and activities of illegal gold mining close to PT Aneka Tambang's sites and the Halimun Mountain National Park. This situation leads to serious environmental degradation.

Objective of the study are to get data of mercury concentration in water, sediment, and biota of the Cikaniki River and to develop effective strategy planning for handling the illegal mining in Pongkor.

Method of this study using survey method. Sampling method based on the Indonesian National Standard No. 06-2421. Sampling was carried out the three different location; up stream, middle stream and down stream of Cikanild River, with five sampling points for each locations. The samples were analyzed in laboratories

of Sarpedal under the Environment Ministry using a mercury analyzer.

For Strategic Planning was collected data from the stake holders at Local Government in Bogor and Nanggung regency by questioner list and analyzed by using SWOT instrument.

Based on this study, might be concluded as follow:

1. The mercury content in the water, sediment, and algae samples taken from the middle stream (B) are higher than those of the samples obtained from the up stream (A) and down stream (C). This concludes that the main source of mercury contamination in the Cikaniki River in location B which is the central site of illegal mining.
2. Based on SWOT analysis, two strategies have been formulized to handle Pongkor illegal gold mining. Those are S-0 (Strength-Opportunity) with score 3,32 and W -T (Weakness-Threat) with score 1,77. It shows that the strength factors of PEf1 and Local Community could be optimized through the community development Other wise, the weaknesses factor should be eliminated to avoid the threat factors. Beside S-0 and W -T strategies , the S-T (Strength Threat) with score 2,60 and W-0 (Weakness-Opportunity) with score 2,48 could be used as next strategies .

Number of References : 37 (1971-2002)</i>